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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/659,837	09/10/2003	John S. Worley	200206306-1	5520
	7590 02/07/200° CKARD COMPANY	EXAMINER		
P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			NGO, CHUONG D	
			ART UNIT	PAPER NUMBER
•			2193	
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVER	Y MODE
3 MO	NTHS.	02/07/2007	PAPER .	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

		Application No.	Applicant(s)			
Office Action Summary		10/659,837	WORLEY, JOHN S.			
		Examiner	Art Unit			
		Chuong D. Ngo	2193			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)⊠	Responsive to communication(s) filed on 20 No	ovember 2006				
	This action is FINAL . 2b) ☐ This action is non-final.					
	ince this application is in condition for allowance except for formal matters, prosecution as to the merits is					
-,_	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
	4) Claim(s) <u>1-19</u> is/are pending in the application.					
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
	Claim(s) <u>1-19</u> is/are rejected.					
7)	Claim(s) is/are objected to.					
اـــا(٥	Claim(s) are subject to restriction and/or	election requirement.				
Applicati	ion Papers					
9)	The specification is objected to by the Examiner	•				
10)🛛	The drawing(s) filed on <u>10 September 2003</u> is/a	re: a)⊠ accepted or b)⊡ obje	ected to by the Examiner.			
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
	Replacement drawing sheet(s) including the correcti	on is required if the drawing(s) is o	objected to. See 37 CFR 1.121(d).			
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority u	ınder 35 U.S.C. § 119	•				
12)	Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. & 1190	a)-(d) or (f)			
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
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AM-at-	, , , , , , , , , , , , , , , , , , ,					
Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date.						
3) 🔲 Inform	mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date		Patent Application (PTO-152)			

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DETAILED ACTION

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 1-19 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

As per claims 1-19, the invention is a computer implemented method of calculation. In order for a claimed invention that is directed to such a computer implemented method to be statutory, the claimed invention must accomplish a practical application. That is the claimed invention must transform an article or physical object to a different state or thing, or produce a useful, concrete and tangible result. State Street, 149 F.3d at 1373-74, 47 USPQ2d at 1601-02. Also see "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility", OG Notices: 22 November 2005. It is clear from claims 10-18 that the claims merely involve calculations and manipulations of data in performing calculations. The claimed invention does not transform an article or physical object to a different state or thing. The inputs are number and the output are also numbers. The result of the invention is merely numerical values without a practical application recited in the claims to make the result useful, concrete and tangible. Therefore, the claimed invention is directed to non-statutory subject matter as the claims fail to assert a practical application to the invention.

The Claimed operation as recited in claims 1-9 and 19 clearly cover a mere computer software/program without embodied in a computer readable storage medium, and thus is as non-

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statutory subject matter as being a software/program per se.

3. Applicant's arguments filed om 11/20/2006 have been fully considered but they are not persuasive.

It is respectfully submitted that the claimed invention is clearly directed to a calculation in a computer, namely a multiply-and-add operation. Such an invention that is directed to a calculation is a 35 U.S.C 101 judicial exception as being an Abstract Idea, and is required a practical application of the judicial exception recited in the claimed in order to be statutory. See MPEP 2105, IV, C, 2. That is the claimed invention must transform an article or physical object to a different state or thing, or produce a useful, concrete and tangible result. Since there is no practical application of the multiply-and-add operation recited in the claim, the claimed invention is directed to non statutory subject matter. Further, the examiner respectfully submits that the greater efficiency and elimination of write dependence as disclosed in the specification are improvements of the invention in performing a calculation. They are not practical applications of the invention. The focus of determination whether the claimed invention produce a useful, concrete, and tangible result is not on whether the steps taken to achieve a particular result are useful, tangible, and concrete, but rather on whether the final result achieved by the claimed invention is useful, tangible and concrete. Therefore, it is respectfully submitted that the rejection of claims 1-19 under 35 U.S.C. 101 is proper.

4. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action. 3

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuong D. Ngo whose telephone number is (571) 272-3731. The examiner can normally be reached on Tuesday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Chuong D Ngo Primary Examiner

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02/04/2007